being merely to ascertain the facts of the case. Some reasons are, however, adduced for believing that the agents are absorbed into the portal circulation and act on the liver directly in passing through that organ.

The reporter disclaims any intention of reopening the old discussion as to the cholagogue effect of mercury on the human subject, and he distinctly points out that the present researches are to be regarded simply as a contribution to comparative physiological pharmacology. At the same time, he invites clinical investigators to compare the results he has obtained by experiment with those which may be observed in human pathology and therapeutics. It is to be hoped that this report may enlist into the ranks of precise clinical observers some of those physicians who are in the habit of giving their five grains of blue pill, with equal confidence in its efficacy and indifference as to its mode of action.—*Brit. Med. Journ.*, Oct. 23, 1875.

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8. *The Physiological Properties of Aldehyd.*—Acetic aldehyd, $C_2H_4O$, a volatile liquid, prepared by the slow oxidation of alcohol in various ways, has recently been examined, from a physiological point of view, by Drs. ALBERTONI and LUSSANA, of Padua, and the following account of their results is an abstract of a portion of their recently-published monograph *On Alcohol, Aldehyd, and the Vinous Ethers.* (a) Aldehyd agrees in its elementary properties with those of alcohol; it coagulates albuminous substances, and whatever dissolves in alcohol is also soluble in aldehyd. It possesses powerful antiputrescent properties: meat can be kept for months, with scarcely any alteration, in an aqueous solution containing from 1 to 3 per cent. of aldehyd. Two hundred grammes of urine, to which four grammes of aldehyd had been added, remained three months without undergoing the slightest decomposition. Its vapours are also equally active. A few grammes of aldehyd poured on the bottom of a vessel containing such easily decomposing bodies as the brain and liver, will preserve them quite fresh for two months. The physiological action of aldehyd on animals is a very powerful one. From three to five grammes diluted with water and injected into the veins of a moderate-sized dog almost instantaneously arrest the respiration, and produce a condition of coma. The heart's action is, however, only slightly weakened, but the muscles are paralyzed, and sensation and reflex excitability are temporarily destroyed. As a rule, however, the animals recover completely in a little while. In smaller doses the aldehyd produces an intoxication similar to that of alcohol, but there is an almost complete loss of sensibility. If the drug is given by the stomach, larger doses of it are required to produce the same effects than if it is injected into the veins, and it gives rise to intense irritation in that organ, and even to gangrene of the mucous membrane, owing to its caustic properties.

Owing to its great volatility, large quantities of aldehyd can be inhaled through the lungs. The most remarkable action of aldehyd in the organism is that which it exerts on the respiratory apparatus: while small quantities immediately accelerate the respiration, large ones arrest it altogether. The animals may then continue without breathing for as much as half an hour, while all the time the heart's contractions remain either normal, or slightly less frequent in number and somewhat increased in strength. Dogs which have not made a single inspiration for ten or fifteen minutes may thus completely recover without any artificial aid. During the stage of asphyxia, irritation of the pneumogastric nerves has not the slightest influence on the heart, and it is only when the breathing commences that the nerves gradually recover their irritability. As long, however, as the animal is at all under the action of the aldehyd, all attempts to stop the heart by irritation of the vagus are unsuccessful; its pulsations are only rendered smaller and less frequent while the blood pressure is diminished. Aldehyd diminishes the temperature of the body in proportion to the dose exhibited. During the stage of asphyxia the temperature may fall even as much as 4° to 5° Cent. (7° to 9° Fahr.). Animals forcibly resist attempts to make them inhale the vapours of aldehyd; but their sensibility and power of motion are completely abolished in about a minute. If the inhalation is continued, their pupils become widely dilated, respiration ceases, and they lie, to all appearance, dead—the only sign of life being the movements of the heart. In spite of all this, they quickly recover if the inhalation is stopped, without vomiting or other unpleasant symptoms. Of thirty deeply narcotized dogs only two died. The vessels of the brain, observed through an opening in the skull, are dilated at the beginning of inhalation, but they contract and leave the brain anæmic when the animal is narcotized, just as they do in animals under chloroform or ether.

The anæsthetic effect of the aldehyd on human beings has been as yet very little investigated, but it is doubtful whether its properties of arresting the breathing, and its irritating action on the lungs and stomach, will not seriously interfere with any attempt to employ it in surgical operations.—*Med. Times and Gaz.*, Sept. 18, 1875.

9. *Therapeutic Use of Bromhydrate of Quinia.*—According to Prof. **GUBLER**, this preparation has special properties which belong neither to bromine nor to quinia separately, but which seem to result from their combination. Like sulphate of quinia, the bromhydrate lessens calorification, diminishes combustion, contracts the capillaries, and augments vascular tension; but acts less on the organ of hearing.

His conclusions are as follows:—

1. The bromhydrate of quinia corresponding to the sulphate of the same base, is more soluble and richer in the alkaloid than the latter.

2. It possesses the physiological properties of the salts of quinia in general, and probably also the therapeutic properties of its officinal congener.

3. Nevertheless the action of the bromhydrate seems to differ from that of the sulphate, not only by inducing less quinia intoxication, but also by producing a marked tendency to nervous sedation and hypnotism.

4. These properties indicate its special use in the treatment of congestive and febrile affections of the nervous system; neuralgia, neuritis, irritative neuroses, encephalic hyperæmia, etc., and for the relief of which excellent results have already been obtained.

5. The bromhydrate of quinia has shown remarkable power in obstinate vomitings, it has been useful in many cases ordinarily amenable to the sulphate of quinia, visceral or articular fluxions of diathetic, rheumatic, or gouty origin, symptomatic fevers, from cold, etc.

6. This new medicine has been given in doses of 40 centigrammes to 1 gramme a day in portions of 20 centigrammes, sometimes in pilular form, sometimes in hypodermic injections.

7. Injected into the cellular tissue, the bromhydrate of quinia is entirely unirritating. In no case, has a hypodermic injection of 20 centigrammes of it, equivalent to 30 centigrammes of the sulphate, been followed by the slightest inflammation, and on the following day there was no redness or tumefaction at the seat of puncture.

8. This perfect innocuousness, with its greater solubility, is an undoubted advantage of this new salt of quinia, and renders it especially preferable whenever it is desirable to administer quinia hypodermically.—*Gaz. Hebdom.*, Sept. 17, from *Journal de Thérapeutique,* July 10 and Sept. 10, 1875.

10. *Hypodermic Injection of Nutritious Substances.*—Dr. **KREUG** gives an account of a trial of this which he has recently made. Drs. Menzel and Perco, he observes, were the first persons who tried, in 1869, some experiments on dogs on the absorption of articles of nutriment by the subcutaneous tissue, and found that an ounce of fluid fat was by the end of forty-eight hours completely absorbed without inducing any peculiar symptoms of reaction. The same was observed with regard to a solution of sugar, milk, and even the yelk of egg. Only one experiment seems to have been tried on man, and that only with nine grains. These authors state also that Stricker and Oser had made experiments with the peptons.

Dr. Kreug observes that cases are always being met with in which artificial feeding is necessary, but cannot be executed by the ordinary means; and it may be required on various occasions to sustain life, at all events temporarily, until other means, for the time inapplicable, can again be resorted to. There are